

**Notice of Allowability**

Application No.

10/817,279

Examiner

Phallaka Kik

Applicant(s)

MEANEY ET AL.

Art Unit

2825

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's amendment filed on 5/16/2007.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>20070518</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|  | 9. <input type="checkbox"/> Other _____.   |

### DETAILED ACTION

1. This Office Action responds to Applicant's amendment filed on 5/16/2007.

Claims 1-10 are pending, wherein claims 1-3,6-9 have been amended. Claims 1-10 have been examined and are allowed, wherein claims 1 and 7 are subjected to the following Examiner's Amendment.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lynn L. Augspurger (Reg. No. 24,227) on 5/21/2007.

The application has been amended as follows:

#### In the claims:

As per **claim 1**, "and" (line 11) has been replaced with --, and while, --;  
--,(coma) has been inserted after "library" (line 12);  
"and" (line 12) has been deleted;  
"optomize" (line 12) has been replaced with --optimize--;  
"said" (line 13) has been replaced with --a--;  
"a hierarchical" (line 14) has been replaced with --said hierarchical--;  
"a circuit" (lines 14-15) has been replaced with --said circuit--.

As per **claim 7**, "providing" (line 3) has been deleted;

--of said orthogonal checker,-- has been inserted after "checks" (line 3);  
--said-- has been inserted after "and" (line 5).

***Allowable Subject Matter***

3. **Claims 1-10** are allowed.

The following is an examiner's statement of reasons for allowance:

As per **claims 1-5**, the independent claim 1, from which the claims depend, recite the method for providing an area optimized binary orthogonality checker, comprising inventive feature, as pointed out by Applicant, in which the hierarchical orthogonal structure is optimized for the hierarchical design of said circuit while maintaining said hierarchical design for said circuit, as part of the minimizing step as claimed, which the prior arts made of record failed to teach or suggest (see Applicant's amendment filed on 5/16/2007, pages 5-6), wherein the further limitations of claims 2 and 4 are exemplify in paragraph [0018] as confirmed by Applicant in the interview conducted on 5/21/2007. Accordingly, the claimed invention is novel and un-obvious over the prior arts made of record.

As per **claims 6-10**, the independent claim 6, from which the claims depend, recites the method employed in a data processing system as claimed, comprising the inventive steps of establishing and providing as claimed, which the prior arts made of record fails to teach or suggest, as pointed out by Applicant (see Applicant's amendment filed on 5/16/2007, pages 5-6). Accordingly, the claimed invention is novel and un-obvious over the prior arts made of record.

***Conclusion***

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phallaka Kik whose telephone number is 571-272-1895. The examiner can normally be reached on Monday-Friday, 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Any response to this action should be mailed to:**

Commissioner for Patents

Application/Control Number: 10/817,279  
Art Unit: 2825

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P. O. Box 1450

Alexandria, VA 22313-1450

**or faxed to:**

571-273-8300

/Phallaka Kik/  
Primary Examiner, Art Unit 2825  
May 21, 2007